# OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## Edited by

## FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

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## **OPINION 299**

Validation, under the Plenary Powers, of the generic names *Tettigonia* and *Acrida* in the Order Orthoptera (Class Insecta) as from Linnaeus, 1758 (Ruling supplementary to the Ruling given in *Opinion* 124)

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## INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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- Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950).
- Professor Tadeusz JACZEWSKI (Department of Systematic Zoology, Warsaw University, Warsaw, Poland) (15th June 1950)
- Professor Robert MERTENS (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950).
- Professor Erich Martin HERING (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950).

## **OPINION 299**

## VALIDATION, UNDER THE PLENARY POWERS, OF THE GENERIC NAMES "TETTIGONIA " AND "ACRIDA " IN THE ORDER ORTHOPTERA (CLASS INSECTA) AS FROM LINNAEUS, 1758 (RULING SUPPLE-MENTARY TO THE RULING GIVEN IN "OPINION " 124)

**RULING**:—(1) Under the Plenary Powers, (a) the names *Acrida* and *Tettigonia* are hereby validated as having been published as subgeneric names by Linnaeus in 1758 in volume 1 of the Tenth Edition of the *Systema Naturae*, (b) *Gryllus turritus* Linnaeus, 1758, is hereby designated to be the type species of *Acrida* Linnaeus, 1758, and (c) *Gryllus viridissimus* Linnaeus, 1758, is hereby designated to be the type species of *Tettigonia* Linnaeus, 1758.

(2) The under-mentioned generic names are hereby placed on the Official List of Generic Names in Zoology as Names Nos. 735 to 738 respectively :--(a) Acheta Fabricius, 1775 (gender : feminine) (type species, by selection by Curtis (1830) : Gryllus domesticus Linnaeus, 1758) ; (b) Acrida Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by designation, under the Plenary Powers, under (1) (b) above : Gryllus turritus Linnaeus, 1758) ; (c) Ledra Fabricius, 1803 (gender : feminine) (type species, by Latreille (1810) : Cicada aurita Linnaeus, 1758) ; (d) Tettigonia Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by selection by Latreille (1810) : Cicada aurita Linnaeus, 1758) ; (d) Tettigonia Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by designation, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by designation, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by designation, under the Plenary Powers, under (1) (a) above (gender : feminine) (type species, by designation, under the Plenary Powers, under (1) (c) above : Gryllus viridissimus Linnaeus, 1758).

(3) The under-mentioned generic names and reputed generic names are hereby placed on the *Official Index* of Rejected and Invalid Generic Names in Zoology as Names Nos. 130 to 138 respectively: (a) Acheta Linnaeus,

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1758 (a reputed but non-existent name); (b) Bulla Linnaeus, 1758 (: 427) (a reputed but non-existent name); (c) Gryllulus Uvarov, 1935 (a junior objective synonym of Acheta Fabricius, 1775); (d) Mantes Geoffroy, 1762 (a name published in a work rejected for nomenclatorial purposes); (e) Mantis Linnaeus, 1758 (a reputed but non-existent name); (f) Tetigonia Geoffroy, 1762 (a name published in a work rejected for nomenclatorial purposes); (g) Tetigonia Fourcroy, 1785 (a junior homonym of Tettigonia Linnaeus, 1758<sup>1</sup>); (h) Tetigonia Blanchard, 1852 (a junior homonym of Tetigonia Fourcroy, 1785); (i) Tettigonia Fabricius, 1775 (a junior homonym of Tettigonia Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above).

(4) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology as Names Nos. 144 to 149 respectively :---(a) aurita Linnaeus, 1758, as published in the combination Cicada aurita (specific name of the type species of Ledra Fabricius, 1803); (b) domesticus Linnaeus, 1758, as published in the combination Gryllus domesticus (specific name of the type species of Acheta Fabricius, 1775); (c) migratorius Linnaeus, 1758, as published in the combination Gryllus migratorius (specific name of the type species of Locusta Linnaeus, 1758, as validated, under the Plenary Powers, in *Opinion* 158); (d) *religiosus* Linnaeus, 1758, as published in the combination *Gryllus religiosus* (specific name of the type species of Mantis Linnaeus, 1767); (e) turritis Linnaeus, 1758, as published in the combination Gryllus turritus (specific name of the type species, by designation, under the Plenary Powers, under (1) (b) above, of Acrida Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above); (f) viridissimus Linnaeus, 1758, as published in the combination Gryllus viridissimus (specific name of the type species, by designation, under the Plenary Powers, under (1) (c) above, of Tettigonia Linnaeus, 1758, as validated, under the Plenary Powers, under (1) (a) above).

<sup>1</sup> See paragraph 18 below.

#### I.—THE STATEMENT OF THE CASE

On 25th September 1947, Dr. Ashley B. Gurney (United States Department of Agriculture, Bureau of Entomology and Plant Quarantine, Washington, D.C., U.S.A.) submitted an application for the use of the Plenary Powers for the validation of the names Tettigonia and Acrida as from Linnaeus, 1758. Systema Naturae, Tenth Edition, the work in which they had appeared as terms for subdivisions of the genus Gryllus Linnaeus, 1758 (Class Insecta, Order Orthoptera). Intermediate terms of this type had been rejected by the International Commission in Opinion 124 as not possessing the status of subgeneric names as from the date on which they were so published by Linnaeus, but at the same time the Commission had issued an open invitation to specialists to submit applications for the validation of such terms as subgeneric names dating from Linnaeus, 1758, in cases where they considered this necessary in order to prevent confusion from arising. It was under this invitation that the present application was submitted by Dr. Gurney. In December 1947 Mr. Francis Hemming, Secretary to the Commission, visited Washington and while there discussed this case with Dr. Gurney. These discussions led Dr. Gurney to revise his application in certain respects, and on 28th September 1948 he submitted the following revised application :---

#### Proposed use of the Plenary Powers to validate the terms "Tettigonia" and "Acrida" (Class Insecta, Order Orthoptera) as subgeneric names as from Linnaeus, 1758 (application submitted in response to the invitation given in 'Opinion '124)

#### By ASHLEY B. GURNEY

(Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, United States Department of Agriculture, Washington, D.C., U.S.A.)

The following application is hereby submitted to the International Commission on Zoological Nomenclature : (1) that *Tettigonia* Linnaeus be accepted as of subgeneric value as from 1758 (*Syst. Nat.* (ed. 10) **1** : 429), under the Plenary Powers. and that it be added to the *Official List of Generic Names in Zoology*, with *Gryllus viridissimus* Linnaeus, 1758, as type species ; (2) that *Acrida* Linnaeus be accepted as of subgeneric value as from 1758 (*Syst. Nat.* (ed. 10) **1** : 427), under the Plenary Powers, and that it be added to the *Official List of Generic Names in Zoology*, with *Gryllus turritus* Linnaeus, 1758, as type species.

#### 1. Tettigonia

2. Tettigonia is one of six subdivisions\* of Gryllus recognised by Linnaeus, 1758, and used by him in a sense corresponding to subgenera of modern workers. Although this term was invalidated as of 1758 by Opinion 124 (1936). most taxonomic workers in the Orthoptera use the generic name Tettigonia Linnaeus, and the great majority of taxonomists and general entomologists utilise the orthopterous name TEITIGONIIDAE<sup>†</sup>. This family name dates from the supergeneric group Tettigoniae of Stoll, 1787 (Spectres, Mantes, etc. T. 1, Amsterdam), which was given the now accepted family-ending -idae by Krauss, 1902 (Zool. Anz. 25: 538). The only other family names that have been widely used in the same sense are LOCUSTIDAE and PHASGONURIDAE<sup>‡</sup>. The former is obviously unavailable here because Locusta is restricted to another family by Opinion 158 (1945). The name PHASGONURIDAE dates from Kirby, 1891 (Trans. ent. Soc. Lond. 1891 : 405), but has been used less generally than TETTIGONIIDAE, and in recent years relatively little, partly because of the assumption on the part of many workers that Phasgonura Stephens, 1835 (Ill. Brit. Ent., Mand. 6:15) (type species : Gryllus viridissimus Linnaeus) is a synonym of Tettigonia Linnaeus, 1758 (see discussion of type species below). Validation of Tettigonia Linnaeus would permit the continued general use of the family name TETTIGONIIDAE, thus avoiding further confusion in the nomenclature of an Order, the family names of which were formerly subject to frequent changes, but which in recent years have gradually become more standardised. The practice of working orthopterists indicates the desirability of validating Tettigonia Linnaeus.

3. There are differences of opinion concerning the species to be accepted as the type species of *Tettigonia* Linnaeus, and in the event of *Tettigonia* being validated, it is important that the type species be fixed beyond further argument. The use of the Plenary Powers may be necessary to fix as the type species the species which will create least confusion in the nomenclature of the Orthoptera. The majority of current workers accept *Gryllus viridissimus* Linnaeus as the type species, but I agree with Roberts, 1941 (*Trans. amer. ent. Soc.* 67 : 30–31) that the first definite selection was that of Kirby, 1890 (*Sci. Proc. Roy. Dublin Soc.* 6 : 481), *Gryllus verucivorus* Linnaeus. If the latter selection is accepted, as should be done under a strict interpretation of the Rules, the genus *Decticus* Serville, 1831 (*Ann. Sci. nat.*, Paris 22 : 159) (type species : *Gryllus verucivorus* Linnaeus) would fall as a synonym of *Tettigonia* Linnaeus, at the same time invalidating the well-known subfamily name DECTICINAE.

4. Uvarov, 1923 (*Trans. ent. Soc. Lond.* 1923 : 493) and others have considered that Leach, 1815 (*Edinburgh Encyclopedia* : 120) selected *Gryllus viridissimus* Linnaeus as the type species of *Tettigonia*. Since Leach merely listed the species with no indication of type significance that I have discovered, type selection is not evident. Karny, 1908 (*Zool. Annalen, Z. f. Ges. Zool.* 2 : 202–208) has argued that

G. viridissimus became the type species through the removal of all the other 16 species originally placed in *Tettigonia* by Linnaeus, 1758. Although selection of type species by elimination was once an accepted practice, it is believed to have no standing under present Rules except in the case of a genus containing two species when one is removed to be type species of another genus (*Opinion* 6, 1910) (also see *Opinion* 62, 1914)<sup>2</sup>. Rehn, 1901 (*Canad. Ent.* 33 : 121) also reasoned by the method of elimination that G. viridissimus is the type species of *Tettigonia*, but his conclusion is so definite that it clearly constitutes a type selection, the first clear cut selection of that species, regardless of the reasoning involved<sup>3</sup>.

5. Kirby, 1890 (*l.c.*) reviewed the originally included species of *Tettigonia* Linnaeus and by the method of elimination concluded that *G. verrucivorus* should be the type species. (Quotation from Kirby : "—— which leaves *G. verrucivorus* as the type of *Tettigonia*".) While not accepting Kirby's method of arriving at a conclusion on the type species of *Tettigonia*, I believe, however, that his concluding statement, quoted above, constitutes a type selection, irrespective of the method used in reaching that conclusion.

6. In the interest of nomenclatorial stability, it appears advisable to fix *Gryllus viridissimus* Linnaeus, 1758, as the type species of *Tettigonia* Linnaeus, 1758.

#### 2. Acrida

7. Acrida is the second subdivision of Gryllus recognised by Linnaeus, 1758. It is of prime importance as the basis of the family name ACRIDIDAE, and, since the acridids include a very large number of highly economic locusts and shorthorned grasshoppers, it is very desirable that stability of the family name be achieved. A great majority of both systematists and economic entomologists now use the name ACRIDIDAE<sup>†</sup>, which is derived from the supergeneric group Acridites of Latreille, 1825 (Fam. Nat. Régne Anim. : 414–416). All other names for the family are unsatisfactory because they lack priority, have had only a small amount of usage, or because they have been applied to different zoological groups in a manner that leads to confusion. For example, the name LOCUSTIDAE dates from the group Locustariae of Latreille, 1804 (Hist. Nat. Crust. Ins. 12: 127–136), but at that time it was

<sup>2</sup> Even this last vestige of the principle of "elimination" was deleted from the *Règles* by the Fourteenth International Congress of Zoology, Copenhagen, 1953, for all future cases, though protection was given to cases where type species had already been determined under *Opinion* 6 (see 1953, *Copenhagen Decisions zool. Nomencl.* : 72, Decision 135).

<sup>a</sup> By a decision taken by the Thirteenth International Congress of Zoology, Paris, 1948, a definite statement by an author that a given species is the type species of a particular genus is to be accepted, other things being equal, as a valid type selection, even if the author making that statement did not regard himself as making a selection and considered that the species in question was already the type species "by elimination" (1950, *Bull. zool. Nomencl.* **4** : 131). applied to katydids or long-horned grasshoppers (the TETTIGONIIDAE of most current usage). In 1829, Stephens (*Brit. Ins.* : 301) applied the name LOCUSTIDAE to grasshoppers and locusts for the first time, and it has recently been done by Comstock, 1930 (*Introd. Ent.* : 252), Essig, 1942 (*College Ent.* : 90) and several others, though the name ACRIDIDAE is used by most modern taxonomists<sup>‡</sup>. To add to the confusion, Comstock, 1930 (*l.c.* : 254) used LOCUSTINAE for the subfamily of "spine-throated locusts", though the genus *Locusta* is not included in that subfamily, actually belonging to the group usually called the OEDIPODINAE.

**8.** A family name based on *Acrydium* has also been used, but *Acrydium* has been almost universally§ applied to the grouse-locusts (TETRIGIDAE), and so ACRYDIIDAE would be confusing if applied to locusts and grasshoppers.

**9.** In order for *Acrida* to be available as a basis for the family name ACRIDIDAE, it appears necessary that it be dated from Linnaeus, 1758, as that generic name was not subsequently brought into general use by orthopterists until the time of Stål, 1873 (*Rec. Orthopt.* **1** : 88, 95—100). Between the time of Linnaeus and Stål, Kirby, 1825 (*Zool. J.* **1** : 432) and Curtis, 1825 (*Brit. Ent.* **2** : 82) applied the name *Acrida* to katydids rather than to short-horned grasshoppers (see Roberts, *l.c.* : 5) so that it becomes essential to establish the validity of *Acrida* as from Linnaeus, 1758. Krauss, 1902 (*Zool. Anz.* **25** : 541) first selected a type species for *Acrida* Linnaeus : *Gryllus turritus* Linnaeus, 1758.

\* Regarding the other sub-divisions of Gryllus Linnaeus, 1758 : Locusta was added to the Official List of Generic Names in Zoology under Opinion 158 (1945) ; Bulla was suppressed as a homonym of Bulla Linnaeus, 1758 (Syst. Nat. (ed. 10) 1 : 725) (Mollusca) under the amendment to Article 34 of the International Code adopted at Padua, 1930 (referred to in Opinion 124, 1936) ; Mantis, as of 1767 (Syst. Nat. (ed. 12) 1 : 689), was added to the Official List under Opinion 149 (1943). Although, under the existing Rules, Acheta was not at any time validly proposed by Linnaeus, this generic name is available for use, dating from Fabricius, 1775 (Syst. Ent. : 279). Curtis, 1830 (Brit. Ent. 7 : 293) selected Gryllus domesticus Linnaeus, as the type species of the genus "Acheta Fab., Lea., Sam," this being the first valid selection, and it establishes Acheta in the same sense as formerly used, dating from Linnaeus, 1758. Karny, 1937 (Gen. Insectorum fasc. 206, Gryllacrididae : 213) listed Acheta Fabricius, 1775 (nec. Linnaeus) as a synonym of Schizodactylus Brullé, 1835, but that is a misapplication of the name, since Acheta has priority. Furthermore, no type selection of Gryllus monstrosus Drury, 1773, the type species of Schizodactylus has come to my attention. (Linnaeus, 1767, used Mantis in a generic sense, Acrida and Acheta in a subgeneric sense.)

† The general use of TETTIGONIDAE and ACRIDIDAE is evidence by the utilisation of these family names in the volumes of the Zoological Record since 1922 (27 years). Both are the names currently used by the Bureau of Entomology and Plant Quarantine, in the United States, and the Commonwealth Institute of Entomology, for the British Commonwealth. The guidance in systematic entomology and large number of routine identifications furnished by these two organizations constitute a great influence on the nomenclatorial usage of entomologists as a whole. Specialists in three outstanding centres of systematic work on Orthoptera, namely, London, Philadilphia and Paris, use the above family names. They also appear in the handbook, "Locusts and Grasshoppers", published by B. P. Uvarov in 1928 and are familiar to nearly all economic workers on grasshoppers.

ACRIDIDAE is the family name used in correspondence from the Anti-Locust Research Centre, in London, which organization is now co-ordinating most of the international work on large-scale grasshopper control and research.

Finally, a survey of published work by leading orthopterists throughout the world during the past fifteen years shows that the preponderance of usage favours the family names TETTIGONIIDAE and ACRIDIDAE.

- <sup>‡</sup> Although the Rules are definite on certain aspects of family names, there is need for further clarification. (See Sabrosky, 1947, *Amer. Naturalist* 81 : 153– 160). (Articles 4 and 5 of the International Rules of Zoological Nomenclature, and *Opinions* 133 (1936) and 141 (1943) of the International Commission on Zoological Nomenclature concern family names.)<sup>4</sup>
- § Roberts, 1941 (*Trans. amer. ent. Soc.* 67: 24) has recently shown that, contrary to the traditional orthopterological practice, *Acrydium* Geoffroy, 1762, actually applies to a zoological unit included in the ACRIDIDAE rather than the TETRIGIDAE.

### II.—THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application: On the receipt in September 1947 of Dr. Gurney's first communication, the question of the validation, under the Plenary Powers, of certain of the terms used by Linnaeus in 1758 for subdivisions of the genus *Gryllus* Linnaeus was allotted the Registered Number Z.N.(S.) 328.

3. Preliminary consultations in 1949 : At the time of the receipt of Dr. Gurney's definitive application in September 1948, the whole of the available resources of the Commission were being devoted to the preparation of the Official Records of the Session held by the Commission at Paris in July of that year. In view, however, of the importance of the present case and of the fact that it affected nomenclature not only in the Order Orthoptera from which point of view it had been submitted by Dr. Gurney but also in the Order Hemiptera, Mr. Hemming judged it desirable to initiate discussions with specialists in both these groups as a preliminary to the publication of Dr. Gurney's application. Accordingly, in January 1949 Mr. Hemming invited the following specialists to furnish statements of their views :—(a) Dr. W. E. China (British Museum (Natural History), London) ; (b) Mr. R. G.

<sup>&</sup>lt;sup>4</sup> The provisions in the *Règles* relating to family-group names were completely revised by the Fourteenth International Congress of Zoology, Copenhagen, 1953 (see 1953, *Copenhagen Decisions zool. Nomencl.* : 32-37, Decisions 43-58).

Fennah (Imperial College of Tropical Agriculture, St. Augustine, Trinidad); (c) Dr. B. P. Uvarov (Anti-Locust Research Centre, London). All these specialists gave their support for the action proposed. The communications so received are given in the immediately following paragraphs.

4. Support received from Dr. W. E. China (British Museum (Natural History), London): On 11th January 1949, Dr. W. E. China (British Museum (Natural History), London) wrote the following letter in support of Dr. Gurney's application :---

No confusion would result in the nomenclature of the Hemiptera from the disappearance of *Tetigonia* Geoffroy, 1762 (either by invalidation or as a homonym of *Tettigonia* L., 1758)<sup>5</sup>. The only change in the nomenclature resulting from such a disappearance would be the restoration of the well-known generic name *Ledra* Fabricius, 1803, type species of the family LEDRIDAE. This would, of course, be all to the good. This fact is set out in China and Fennah, October 1945, *Ann. Mag. nat. Hist.* (11) **12**: 711–712: "By the above dispositions the only nomenclatorial change in Hemiptera which would result from any future invalidation of *Tetigonia* Geoffroy or from any validation of *Tettigonia* L. (Orthoptera) would be the restoration of the generic name *Ledra*."

5. Support received from Mr. R. G. Fennah (Imperial College of Tropical Agriculture, Trinidad): On 12th January 1949, Mr. R. G. Fennah (Imperial College of Tropical Agriculture, Trinidad) wrote a letter in support of Dr. Gurney's application, and on 30th January 1949, he followed this up with a further letter, in which he drew attention to the name Tetigonia Fourcroy, 1785, and suggested that in the decision to be taken on this case the Commission should make it clear that the above name—and also Tetigonia Geoffroy, 1762—were to be treated as junior homonyms of the name Tettigonia now proposed to be validated as from Linnaeus, 1758, i.e. the fact that the names published by Geoffroy and Fourcroy on the one hand and by Linnaeus on the other hand differed from one another in spelling by the use, in the first case, of a single "t" in the middle of the name, and, in the second case, by the use of a double "t" was to be ignored for the

<sup>&</sup>lt;sup>5</sup> By a decision taken by the International Commission in 1948 and since embodied in *Opinion* 228 (1954, *Ops. Decls. int. Comm. zool. Nomencl.* **4** : 209–220), it has been ruled that Geoffroy's *Histoire abrégée* is not available for nomenclatorial purposes. The name *Tetigonia* Geoffroy, 1762, here referred to by Dr. China is in any case, an invalid name.

purposes of the Law of Homonymy<sup>6</sup>. The letters so received from Mr. Fennah were as follows :---

#### A. Extract from letter dated 12th January 1949.

I understand that Dr. China has supplied you with the technical details regarding the change which will occur in Hemiptera, if *Tettigonia* of Linnaeus is validated.

The consequential suppression of *Tetigonia* Geoffroy would undoubtedly be welcomed by hemipterists, as the generic name *Ledra*, which was displaced by China & Fennah in 1945, is well known and long established. Moreover, the combination *Tetigonia aurita* (Linnaeus) is still novel and has not entered into literature, apart from the original proposals, as far as I know.

#### B. Extract from letter dated 30th January 1949.

There is one trivial item worthy of mention when you are writing up the case, and that is the generic name *Tetigonia* Fourcroy, which was not mentioned in the China & Fennah paper.

*Tetigonia* Geoffroy, 1762, is, as you say in your letter of 14th January, invalid under the decision of the Paris Congress. But the generic name was cited and validated by Fourcroy, 1785, *Ent. paris.* 1:193, with the original spelling.

It would accordingly be advisable to make it quite plain that *Tettigonia* with two "t's" is, for the purposes of judging preoccupation of the name, the same as *Tetigonia* with one "t". This would squarely place Fourcroy's *Tetigonia* in homonymy.

6. Support received from Dr. B. P. Uvarov (Anti-Locust Research Centre, London): On 19th January 1949, Dr. B. P. Uvarov (Anti-Locust Research Centre, London) communicated the following statement in support of Dr. Gurney's proposal :--

The proposal that *Tettigonia* Linnaeus, 1758, be accepted as of subgeneric value under the Plenary Powers, and that it be added to the *Official List* with *Gryllus viridissimus* Linnaeus, 1758, as type species, is supported and it is considered that such action will eliminate confusion.

*Tetigonia* Geoffroy, 1762, should be definitely rejected as a homonym of *Tettigonia* Linnaeus, 1758, as this action would prevent further confusion.

<sup>&</sup>lt;sup>6</sup> See paragraph 18 of the present Opinion.

The proposal that Acrida Linnaeus, 1758, be accepted as of subgeneric value, under the Plenary Powers and that it be added to the Official List with Gryllus turritus Linnaeus, 1758, as type species, is supported. This action will stabilise the use of the family name ACRIDIDAE in the sense in which it is now used by all taxonomic workers in the group. The name ACRIDIDAE has formed the basis of the French designation of five successive international anti-locust conferences (1931, 1932, 1934, 1936 and 1938) as "Conferences internationales anti-acridiennes". It is also incorporated in the name of the "Office National Anti-Acridien", which is the French central institution for anti-locust research ; and in the name of the "Comite Interamericano Permanente Antiacridiano" established in 1948 by a Convention of nine South and Central American States.

Finally, the term "acridology" is now being increasingly used to define that branch of entomology which deals with ACRIDIDAE.

7. Review in 1950 by Mr. Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, of outstanding problems in connection with the terms used to denote subdivisions of the genus "Gryllus" by Linnaeus in 1758 : When, after the publication in the summer of 1950 of the volumes of the Bulletin of Zoological Nomenclature containing the Official Records of the Session held by the Commission at Paris in 1948, Mr. Hemming was able to resume preparations for the publication in the Bulletin of applications relating to individual nomenclatorial cases, he formed the view that it was desirable that the opportunity presented by the application submitted by Dr. Gurney should be taken to clear off all outstanding questions relating to the status of the terms used by Linnaeus in 1758 to denote subdivisions of the genus Gryllus Linnaeus. He accordingly prepared the following Report on this subject for consideration by the Commission :---

First Report on matters left unsettled in "Opinion" 124, in relation to the status of the terms used by Linnaeus in 1758 to denote subdivisions of genera established in the 10th edition of the "Systema Naturae"

> The subdivisions of the genus "Gryllus" Linnaeus, 1758 (Class Insecta, Order Orthoptera)

By FRANCIS HEMMING, C.M.G., C.B.E. (Secretary to the International Commission on Zoological Nomenclature)

1. At its meeting held in Paris in 1948 the International Commission on Zoological Nomenclature placed on record their disapproval of the

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practice sometimes adopted in the past, under which the decision given in an *Opinion* dealt with part only of the issues involved, and agreed to invite the Secretary to the Commission (a) to examine all the *Opinions* so far rendered, with a view to ascertaining every instance where an application had been dealt with incompletely and (b) to submit proposals as soon as possible for the rendering, as a matter of urgency, of supplementary *Opinions* dealing with the questions left unanswered in the earlier *Opinions* concerned (1950, *Bull. zool. Nomencl.* **4** : 355). This decision was endorsed by the Thirteenth International Congress of Zoology (1950, *Bull. zool. Nomencl.* **5** : 104—105).

2. Opinion 124 provides a conspicuous example of the class of case covered by the foregoing decision, for that Opinion lays down a general principle applicable to all the terms used by Linnaeus to denote subdivisions of genera, but discusses the effect of that decision in relation to one only of the genera concerned (Gryllus Linnaeus, 1758) and, even in that case, in relation to one only of the six terms used by Linnaeus to denote subdivisions of that genus. The submission by Dr. Ashley B. Gurney of proposals relating to two other of the terms used by Linnaeus to denote subdivisions of the genus Gryllus provides a convenient opportunity for placing before the Commission proposals for such further action as is necessary in order to fill in all the gaps in Opinion 124, in so far as that Opinion is concerned with the status to be accorded to the terms used by Linnaeus in 1758 to denote subdivisions of the foregoing genus. I accordingly decided to devote to this subject the first of the Reports which, under the decision of the International Congress of Zoology quoted in paragraph 1 above, I have been asked to prepare in regard to matters left unsettled by Opinion 124. This Report I now submit for consideration by the International Commission on Zoological Nomenclature. Further Reports dealing with terms used by Linnaeus in 1758 to denote subdivisions of genera, other than Gryllus Linnaeus, will be submitted, as and when opportunity offers.

3. Arrangement of Report: In the present Report, I deal, in turn, with each of the six terms used by Linnaeus in 1758 to denote subdivisions of the genus Gryllus. In each case I indicate such action, if any, as has already been taken by the Commission in regard thereto and refer to the proposals in regard to certain of those terms which have been submitted to the Commission by Dr. Ashley B. Gurney. Where necessary, I indicate such further consequential action as is necessary, in order completely to dispose of the cases concerned.

4. The term Mantis as used by Linnaeus: At Lisbon in 1935 the International Commission decided to place on the Official List of Generic Names in Zoology the generic name Mantis Linnaeus as from

1767, that being the date on which this name was first validly used as a generic name, its use on that occasion being acceptable to specialists as it was in accordance with current nomenclatorial practice. By this decision therefore the Commission decided also that there were no grounds for the use of the Plenary Powers for the purpose of validating the name Mantis as from Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:425). All therefore that is now required in this connection is that the reputed but non-existent generic name Mantis Linnaeus, 1758, should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology. It should be noted that some others have suggested that the name Mantis Linnaeus, 1767, is ante-dated by the name Mantes Geoffroy, 1762 (Hist. abrég. Ins. Paris 1: 399), but this is not correct, for the Commission has decided that, in the work quoted, Geoffroy did not apply the principles of binominal nomenclature and therefore that no name published therein acquires availability in zoological nomenclature on that account (see 1950, Bull. zool. Nomencl.  $4:366-369)^7$ . It would be well, however, finally to dispose of this matter by placing the reputed but non-existent generic name Mantes Geoffroy on the Official Index. Finally, it is necessary at this point to refer to the decision taken by the International Congress of Zoology in 1948 that the trivial names of the type species of genera placed on the Official List of Generic Names in Zoology should, when they are the oldest available names for the species concerned, be placed on the Official List of Specific Trivial Names in Zoology; this decision is retrospective and will therefore in any case apply in the present instance when the foregoing Official *List* comes to be compiled. It will be convenient, however, to take the present opportunity to deal with this matter by placing on the Official List the trivial name religiosus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 426, as published in the binominal combination Gryllus religiosus, that being the trivial name of the type species of Mantis Linnaeus, 1767.

5. The term Acrida as used by Linnaeus: Dr. Gurney's proposal (that Acrida should be placed on the Official List of Generic Names in Zoology with status as from Linnaeus, 1758 (Syst. Nat. (ed. 10) 1 : 427), and with Gryllus turritus Linnaeus, 1758, as type species) covers all the principal matters which call for action in this case. It should be noted, however, that, since at present the term Acrida possesses no status as a subgeneric name as from Linnaeus, 1758, it follows automatically that there is at present no nominal genus (or subgenus) Acrida Linnaeus, 1758, and consequently that, if (as proposed by Dr. Gurney) the Plenary Powers are used to bring into existence the subgeneric name Acrida Linnaeus, 1758, the same Powers will need to be used to provide that newly created nominal subgenus with a type species. Further, for the reasons explained (in paragraph 4) in connection with the generic name Mantis Linnaeus, 1767, it will be necessary to place on the Official List of Specific Trivial Names in Zoology the trivial name turritus Linnaeus, 1758, as published in the binominal

<sup>7</sup> See footnote 5.

combination *Gryllus turritus*, the trivial name of the species proposed by Dr. Gurney to be designated as the type species of this genus.

6. The term Bulla as used by Linnaeus: The International Commission. in Opinion 124, pointed out that, even if Linnaeus had in 1758 (Syst. Nat. (ed. 10) 1 : 427) published the name *Bulla* as the name of a subgenus of Grvllus Linneaus, 1758 (Class Insecta), that name, being a subgeneric name, would have fallen (under a rule then recommended by the Commission to the Congress) as a homonym of the Gastropod name Bulla Linnaeus, 1758 (Švst. Nat. (ed. 10) 1:725), the latter name having been published as a generic name and accordingly, being of the same date, possessing priority over its homonym published as a sub-The Gastropod name Bulla Linnaeus has now been generic name. placed on the Official List of Generic Names in Zoology (see 1950, Bull. zool. Nomencl. 4: 305); all that is called for therefore to complete the action required in the present case is to place the reputed but non-existent name Bulla Linnaeus, 1758 (in the Class Insecta) on the Official Index of Rejected and Invalid Generic Names in Zoology.

7. The term Acheta as used by Linnaeus: Dr. Gurney has explained in the first of the footnotes to his application that, while in the past some authors have treated Acheta as having acquired subgeneric status as from Linnaeus, 1758 (Svst. Nat. (ed. 10) 1: 428), others have used this name as published by Fabricius in 1775 (Syst. Ent. : 279-282, 826), when it was employed in a strictly binominal sense. It was there used by Fabricius for ten species, of which the second was Gryllus domesticus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:428). This species was selected as the type species by Curtis in 1830 (Brit. Ent. 7:293), and this generic name is currently used in this sense. As, under Opinion 124, the name Acheta has no standing as a subgeneric name as from Linnaeus, 1758, and as Fabricius (1775) was the first author to use the word Acheta as a generic or subgeneric name, the name Acheta Fabricius, 1775, is an available name. Further, as its type species under the Règles (Gryllus domesticus Linnaeus, 1758) is the species currently accepted as such, there is no reason why the International Commission should use its Plenary Powers to validate the name Acheta as from Linnaeus, 1758, the present position by which that name ranks from Fabricius, 1775, being perfectly satisfactory. All that is required to make the position clear is (1) to place the generic name Acheta Fabricius, 1775, on the Official List of Generic Names in Zoology and the trivial name domesticus Linnaeus, 1758, as published in the binominal combination Gryllus domesticus, on the Official List of Specific Trivial Names in Zoology, and (2) to place the reputed but non-existent subgeneric name Acheta Linnaeus, 1758, on the Official Index of Rejected and Invalid Generic Names in Zoology. Dr. Gurney and Dr. B. P. Uvarov, whom I have consulted, both support this proposal. Dr. Uvarov points out that his name Gryllulus (Uvarov,

1935, Ann. Mag. nat. Hist. (10) 16: 320) is an objective synonym of Acheta Fabricius, 1775; it is accordingly proposed that that name should be added to the Official Index of Rejected and Invalid Generic Names.

8. The term Tettigonia as used by Linnaeus: Dr. Gurney and Dr. Uvarov (supported from the point of view of hemipterological literature by Dr. W. E. China and Mr. R. G. Fennah) recommend that the Commission should use its Plenary Powers to validate the name *Tettigonia* as of subgeneric status as from Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:429); Dr. Gurney and Dr. Uvarov further propose that the nominal species to be accepted as the type species of this genus should be Gryllus viridissimus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:430). For the reasons already explained in the parallel case of Acrida Linnaeus, 1758 (paragraph 5 above), it will be necessary for the Commission to use its Plenary Powers for the latter, just as much as for the former, of these purposes. The only other action called for in connection with this name is (for the reasons explained in paragraph 4 above in connection with the name Mantis) to place on the Official List of Specific Trivial Names in Zoology the trivial name viridissimus Linnaeus, 1758, as published in the binominal combination Gryllus viridissimus, that being the trivial name of the nominal species recommended by Dr. Gurney for recognition as the type species of Tettigonia Linnaeus, 1758.

9. The reputed generic name Tetigonia Geoffroy, 1762: The action proposed by Dr. Gurney and Dr. Uvarov will serve two valuable purposes, quite unconnected with one another : first, it will (as they desire) provide a legal foundation for the name *Tettigonia* as a generic name in the Order Orthoptera ; second, it will eliminate, as an invalid junior homonym (under the provision which is to replace (1950, Bull. zool. Nomencl. 4: 161–162) subsection (d)<sup>8</sup> in the third paragraph of Article 35, as applied to Article 34), the confusingly similar name Tetigonia in the Order Hemiptera. The disappearance of this name is welcomed by both Dr. China and Mr. Fennah. It is desirable that the present opportunity should be taken to make the position clear by placing on the Official Index of Rejected and Invalid Generic Names in Zoology both (1) the name Tetigonia Geoffroy, 1762, Hist. abrég. Ins. Paris 1:429 (which, quite apart from the application submitted by Dr. Gurney, is already an invalid name having been published in a work in which the author (Geoffroy) did not apply the principles of binominal nomenclature—see 1950, Bull. zool. Nomencl. 4: 366—369), (2) the name Tettigonia Fabricius, 1775, Syst. Ent. : 678 (which, pending the approval of Dr. Gurney's proposal, is an available name), (3) Tetigonia Fourcroy, 1785, Ent. paris. 1: 193 (an invalid homonym of Tettigonia Fabricius, 1775) ,and (4) Tetigonia Blanchard, 1852, in Gay, Hist. Chile (Zool.) 7: 282.

<sup>8</sup> See paragraph 18 of the present Opinion.

10. Effect of eliminating the name Tetigonia from hemipterological literature: Dr. China has pointed out that the final elimination of the name Tetigonia from the literature of the Order Hemiptera will be to restore to unquestioned availability the generic name Ledra Fabricius. 1803 (Syst. Rhyngot. : 24), and consequently also the family name LEDRIDAE. Dr. China, after examining and (rightly) rejecting the claim advanced by Kirkaldy that Fabricius had himself designated a type species for the genus Ledra, has reported (in litt., 18th January 1949) that the first valid selection of a type species for this genus was that by Latreille in 1810 (Consid. gén. Crust. Arach. Ins.: 434) of Cicada aurita Linnaeus, 1758, Syst. Nat. (ed. 10) 1:435. In view of the uncertainty that has existed regarding the status of the generic name Ledra, having regard to the competing (but now finally rejected) claims of Tetigonia Geoffroy, 1762, it is clearly desirable that the name Ledra Fabricius should be placed on the Official List of Generic Names in Zoology, with the above species as type species, the trivial name aurita Linnaeus, 1758, as published in the binominal combination Cicada aurita, the trivial name of that species, being at the same time placed on the Official List of Specific Trivial Names in Zoology.

11. The term Locusta as used by Linnaeus: At Lisbon in 1935 the International Commission used its Plenary Powers (a) to validate the name Locusta, as from Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:431), and (b) to designate Gryllus migratorius Linnaeus, 1758, to be the type species of that genus. The decision was later embodied in Opinion 158. The only supplementary action now required is (for the reasons explained in paragraph 4 above in connection with the name Mantis) to place the trivial name migratorius Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:432), as published in the binominal combination Gryllus migratorius, on the Official List of Specific Trivial Names in Zoology that List not having been in existence at the time when the Commission dealt with this name in 1935.

12. Having now reviewed (a) the action already taken by the International Commission in regard to the terms used by Linnaeus in 1758 to denote subdivisions of the genus Gryllus Linnaeus, and (b) the proposals in regard to two of those terms submitted by Dr. Ashley B. Gurney, and having submitted also certain supplementary recommendations on various matters either connected with the status to be accorded to the foregoing terms or arising incidentally in connection therewith, we may summarise as follows the proposals now laid before the International Commission. These are that the Commission should :---

(1) use its Plenary Powers to validate, as of subgeneric status, the names specified in Column (1) below, those names to be treated as having been published by Linnaeus in 1758 on the pages of the 10th edition of the *Systema Naturae* there specified, and (b) to designate, as the type species of the nominal subgenera in question, the species severally specified in Column (2) below :

Name of subgenus

Nominal species designated as the type species of subgenus specified in Col. (1)

(2)

Acrida Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 427

(1)

*Gryllus turritus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1 :** 427

*Tettigonia* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1 :** 429

Gryllus viridissimus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:430

- (2) place the under-mentioned generic names on the Official List of Generic Names in Zoology, with the type species severally specified below :—
  - (a) Acheta Fabricius, 1775, Syst. Ent.: 279–282, 826 (type species, by subsequent selection by Curtis, 1830 (Brit. Ent. 7: 293): Gryllus domesticus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 428)
  - (b) Acrida Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 427 (as proposed, under (1) above, to be validated under the Plenary Powers) (type species, by designation, as proposed in (1) above, under the Plenary Powers : Gryllus turritus Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 427)
  - (c) Ledra Fabricius, 1803, Syst. Rhyngot. : 24 (type species, by subsequent selection by Latreille, 1810 (Consid. gén. Crust. Arach. Ins. : 434) : Cicada aurita Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 435)
  - (d) Tettigonia Linnaeus, 1758, Syst. Nat. (ed. 10) 1:429 (as proposed, under (1) above, to be validated under the Plenary Powers) (type species by designation, as proposed in (1) above, under the Plenary Powers: Gryllus viridissimus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:430);
- (3) place the under-mentioned generic names and alleged generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:—
  - (a) Acheta Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 428 (a reputed but non-existent name)
  - (b) Bulla Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 427 (a reputed but non-existent name)

- (c) Gryllulus Uvarov, 1935, Ann. Mag. nat. Hist. (10 16:320 (an invalid junior synonym of Acheta Fabricius, 1775)
- (d) *Mantes* Geoffroy, 1762, *Hist. abrég. Ins. Paris* 1 : 399 (a name possessing no status because published by an author who did not apply the principles of binominal nomenclature)
- (e) Mantis Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 425 (a reputed but non-existent name)
- (f) Tetigonia Geoffroy, 1762, Hist. abrég. Ins. Paris 1:429 (a name possessing no status because published by an author who did not apply the principles of binominal nomenclature)
- (g) Tetigonia Fourcroy, 1785, Ent. paris. 1: 193 (an invalid junior homonym of Tettigonia Linnaeus, 1758, as proposed, under (1) above, to be validated under the Plenary Powers)<sup>9</sup>
- (h) Tetigonia Blanchard, 1852, in Gay, Hist. Chile (Zool.) 7 : 282 (an invalid junior homonym of Tettigonia Linnaeus, 1758, as proposed, under (1) above, to be validated under the Plenary Powers)<sup>9</sup>
- (i) Tettigonia Fabricius, 1775, Syst. Ent.: 678 (an invalid junior homonym of Tettigonia Linnaeus, 1758, as proposed, under (1) above, to be validated under the Plenary Powers);
- (4) place the undermentioned trivial names on the Official List of Specific Trivial Names in Zoology:—
  - (a) aurita Linnaeus, 1758, as published in the binominal combination Cicada aurita (trivial name of type species of Ledra Fabricius, 1803)
  - (b) domesticus Linnaeus, 1758, as published in the binominal combination Gryllus domesticus (trivial name of type species of Acheta Fabricius, 1775)
  - (c) *migratorius* Linnaeus, 1758, as published in the binominal combination *Gryllus migratorius* (trivial name of type species of *Locusta* Linnaeus, 1758)
  - (d) religiosus Linnaeus, 1758, as published in the binominal combination Gryllus religiosus (trivial name of type species of Mantis Linnaeus, 1767)
  - (e) turritus Linnaeus, 1758, as published in the binominal combination Gryllus turritus (trivial name of species proposed, under (1) above, to be designated under the Plenary Powers as type species of Acrida Linnaeus, 1758)
  - (f) viridissimus Linnaeus, 1758, as published in the binominal combination Gryllus viridissimus (trivial name of species proposed, under (1) above, to be designated under the Plenary Powers as type species of Tettigonia Linnaeus, 1758)

<sup>9</sup> See paragraph 18 of the present Opinion.

8. Publication in 1951 of Dr. Gurney's application and associated documents: Dr. Gurney's application and the associated documents reproduced in the immediately preceding paragraphs were sent to the printer on 1st January 1951 and were published in Part 4 of volume 2 of the Bulletin of Zoological Nomenclature on 20th April 1951 (Gurney, 1951, Bull. zool. Nomencl. 2: 106–109; China, 1951, *ibid.* 2: 109, Fennah, 1951, *ibid.* 2: 110; Uvarov, 1951, *ibid.* 2: 111; Hemming, 1951, *ibid.* 2: 112–118).

9. Issue of Public Notices: Under the revised arrangements approved by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4: 51-56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was issued on 20th April 1951, both in Part 4 of volume 2 of the Bulletin of Zoological Nomenclature, the Part in which Dr. Gurney's application and the associated documents were published, and also to the other prescribed serial publications. In addition, Notice was given to a number of entomological serial publications in Europe and America. The publication of these Notices elicited no objection to the action proposed.

10. Support received for Dr. Gurney's application after publication: After the publication of Dr. Gurney's application and the associated documents in the Bulletin, support for the action proposed was received from the following specialists: (a) Dr. Joshua L. Baily, Jr. (San Diego, California, U.S.A.); (b) Dr. Klaus Günther (Institut für Genetik der Freien Universität, Berlin); (c) Mr. D. K. McE. Kevan (University of Nottingham, School of Agriculture, Sutton Bonington, Loughborough, England). The communications so received are given in the immediately following paragraphs.

11. Support received from Dr. Joshua L. Baily, Jr. (San Diego, California, U.S.A.): In a letter dated 22nd June 1951 (which was mainly concerned with other cases), Dr. Joshua L. Baily, Jr. (San Diego, California, U.S.A.) wrote of the present case: "It would seem logical to place the name Bulla as the name of a subgenus of Gryllus on the Official Index of Rejected and Invalid Generic Names in Zoology".

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12. Support received from Dr. Klaus Günther (Institut für Genetik der Freien Universität, Berlin): On 5th July 1951, Dr. Klaus Günther (Institute für Genetik der Freien Universität, Berlin) wrote the following letter in support of the action proposed in the present case (Günther, 1952, Bull. zool. Nomencl. 6:84--85):--

I beg leave to state my decided support of the proposals submitted by Dr. Ashley B. Gurney (1951, *Bull. zool. Nomencl.* **2**: 106–109) that the names *Tettigonia* Linnaeus, 1758, and *Acrida* Linnaeus, 1758, in the Order Orthoptera (Class Insecta) should be validated by the International Commission on Zoological Nomenclature under its Plenary Powers with *Gryllus viridissimus* Linnaeus, 1758, and *Gryllus turritus* Linnaeus, 1758, as the respective type species of these genera. This action appears to be the best and almost the only way to avoid further unbearable confusion in the nomenclature of the Orthoptera.

13. Support received from Mr. D. K. McE. Kevan (University of Nottingham, School of Agriculture, Sutton Bonington, Loughborough, England): On 25th July 1951, Mr. D. K. McE. Kevan (University of Nottingham, School of Agriculture, Sutton Bonington Loughborough, England) submitted the following statement supporting the action proposed in the present case and making certain suggestions :---

#### On the subdivisions of the genus "Gryllus" Linnaeus, 1758

## By D. KEITH McE. KEVAN (School of Agriculture, University of Nottingham)

In connexion with the communications of Gurney, China, Fennah, Uvarov and Hemming (1951, *Bull. zool. Nomencl.* **2**: 106–118), I should like to make the following comments :--

(1) I wish fully to endorse the measures already adopted or proposed in respect of the reputed but non-existent names *Mantis, Acrida, Bulla, Acheta, Tettigonia* and *Locusta*, all as of Linnaeus, 1758, for the reasons advanced by the various authors concerned.

(2) I would, however, seek the assurance of the Commission that they do not create (or, in the case of *Locusta*, have not created) any unfor-

tunate precedent by validating such reputed but *non-existent* names since I am not certain of the logic of this procedure, however desirable it may be. Presumably "suspension of the rules" does permit invalid terms to be brought into existence as valid names.

(3) If, as I presume, the above is permissible, I feel that it should be made clear that, in the case of *Acrida*, *Tettigonia* and *Locusta*, this course (virtually of name-creation) has been deliberately adopted in favour of the alternative one involving the suppression (by means of the Commission's Plenary Powers) of all senior homonyms in favour of the earliest generally acceptable *valid* junior homonym because of the great confusion which would occur as a result of permitting the offending senior homonyms to retain their priority.

(4) It should be noted that the latter of the two courses would be more consistent-since, under the Règles and Opinion 124, Mantis does not and Acheta would not date as from Linnaeus, 1758, but from (the first) valid usage in each case—but, although the difficulties in the way of pursuing this course would probably not be insurmountable, the means of achieving a satisfactory solution to the confused problem of nomenclature, particularly in respect of Tettigonia, would be unnecessarily involved. Therefore, since the term Locusta has already been validated as a subgeneric name as of Linnaeus, 1758 (Opinion 158)-albeit originally in an unusual manner (see Roberts, 1941, Trans. amer. ent. Soc. 67: 27)-a precedent exists and it seems more expedient to follow it by validating, also as subgeneric names, the terms Acrida and Tettigonia as of Linnaeus, 1758, rather than from later authors and dated. Whether it would also be preferable, for the sake of consistency, to adopt the same course in respect of Mantis and Acheta also, as suggested by Roberts (l.c.: 5), is, I think, a matter for the Commission to decide when considering Dr. Gurney's application. Personally, I am not in favour of doing so since adherence to the Règles and Opinion 124, in the case of these two names, raises no complicated issues; each case should be considered on its merits and not on the basis of consistency, and in any event the case of *Mantis* is virtually a closed book.

(5) It should perhaps also be mentioned that, irrespective of which of the two courses referred to is adopted, the family names ACRIDIDAE and TETTIGONIIDAE are not jeopardized since a family name does not need to be derived from the oldest valid generic name contained within the family (*Opinions* 133 and 141). I fully endorse that it is essential that these family names (especially the former) be retained in their current sense for the reasons already advanced by Gurney and Uvarov (l.c.).

(6) In respect of the type species of the genera and subgenera concerned, I am in full agreement with the measures already adopted or proposed for their designation. In connexion with the type species of *Tettigonia*, however, some comment is called for. This is that the designation by Kirby (1890, *Sci. Proc. R. Dubl. Soc.* (n.s.) **6**:581) of *Gryllus verucivorus* Linnaeus, 1758, is the type species of *Tettigonia* Linnaeus, 1758 is not, according to the present rules, in order since under the *Règles* and *Opinion* 124, the latter name is not valid as of that author and date and cannot be considered so until such time as the Commission, by its Plenary Powers, makes it so. Thus the acceptance by Roberts (*l.c.* : 30–31) of Kirby's designation now seems unnecessary—a point which Gurney (*l.c.* : 107) does not make—and the complications in respect of the names *Decticus* Audinet-Serville, 1831, DECTICINAE and TETTIGONIINAE considered inevitable by Roberts (*l.c.*) and mentioned also by Gurney (*l.c.*) and the attendant resurrection of *Phasgonura* Stephens, 1835, may be avoided.

### III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

14. Issue of Voting Paper V.P.(52)16: On 15th April 1952, a Voting Paper (V.P.(52)16) was issued in which the Members of the Commission were invited to vote either for, or against, the proposal "relating to the names *Tettigonia*, *Acrida*, etc., as originally published for subdivisions of the genus *Gryllus* Linnaeus, 1758 (application made under the invitation issued in *Opinion* 124), as specified in Points (1) to (4) on pages 116 to 118 in volume 2 of the *Bulletin of Zoological Nomenclature*" [i.e. the Points set out in paragraph 12 of the Secretary's Report reproduced in paragraph 7 of the present *Opinion*].

**15.** The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the prescribed Voting Period closed on 15th July 1952.

**16.** Particulars of the Voting on Voting Paper V.P.(52)16 : The state of the voting on Voting Paper V.P.(52)16 at the close of the prescribed Voting Period was as follows :—

(a) Affirmative Votes had been given by the following seventeen
(17) Commissioners (arranged in the order in which Votes were received):

Hering; Calman; Riley; Dymond; Esaki; do Amaral; Hankó; Bonnet; Mertens; Lemche; Vokes; Pearson<sup>10</sup>; Cabrera; Bradley; Boschma; Stoll; Hemming;

(b) Negative Votes:

None;

(c) Voting Paper V.P.(52)16 was not returned by one (1) Commissioner:

Jaczewski.

17. Declaration of Result of Vote: On 16th July 1952, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(52)16, signed a Certificate that the Votes cast were as set out in paragraph 16 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

18. On 1st March 1954, Mr. Hemming, as Secretary to the Commission, placed on File Z.N.(S.) 328 the following Minute

<sup>&</sup>lt;sup>10</sup> Commissioner Pearson exercised in this case the right conferred by the Thirteenth International Congress of Zoology in Paris, 1948, under which a Commissioner may, if he so desires, signify his willingness to support the view, or the majority view, of other members of the Commission (1950, *Bull. zool. Nomencl.* 4 : 50-51).

drawing attention to the decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, to protect rulings previously given by the International Commission on Zoological Nomenclature on the status of individual generic names under the Law of Homonymy (Article 34) from being subject to review in the light of the amendment of the foregoing Law then adopted and taking note that under this provision the decision taken in Voting Paper V.P.(52)16 that the name *Tetigonia* Fourcroy, 1785, was to be rejected as a junior homonym of *Tettigonia* Linnaeus, 1758 remained unaffected :—

Attention is drawn to the fact that the Fourteenth International Congress of Zoology, Copenhagen, 1953, modified the provision in the *Règles* relating to the criteria to be adopted in determining whether the components of any given pair of generic names are to be treated as homonyms by substituting for the provisions adopted by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4: 130-131, 161-162) a provision that " a generic name is not to be rejected as a homonym of another such name if it differs from it in spelling by even one letter ". Under this provision the name *Tetigonia* Fourcroy, 1785, proposed for rejection as a junior homonym of Tettigonia Linnaeus, 1758, in paragraph 12(3) (g) of the Report -reproduced in paragraph 7 of the present Opinion-, though correct under the provisions then in force, would not be liable to be so rejected without resort to the use of the Commission's Plenary Powers. At the same time, however, the Copenhagen Congress inserted a saving clause protecting the position as regards any name which had already been rejected by the Commission under the previously existing provisions in the *Règles* on this subject (1953, *Copenhagen Decisions zool. Nomencl.* : 78). Accordingly, as the result of the Voting in the present case (on Voting Paper V.P.(52)16) was declared prior to the Copenhagen Congress, the decision taken in the Vote on the foregoing Voting Paper to reject the name *Tetigonia* Fourcroy, 1785, on the foregoing ground is not adversely affected by the amendment of Article 34 made by the Copenhagen Congress.

**19.** On 8th March 1954, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(52)16.

20. The original references for the names which appear in the Ruling given in the present *Opinion* are set out in paragraph 12

of the Report by the Secretary reproduced in paragraph 7 of the said *Opinion*. In the same paragraph are given also the references to the places where the type species of the nominal genera *Acheta* Fabricius, 1775, and *Ledra* Fabricius, 1803, were first validly selected under Rule (g) in Article 30.

21. The genders of the generic names cited in the Ruling given in the present *Opinion* are as follows :

Acheta Fabricius, 1775—feminine. Acrida Linnaeus, 1758—feminine. Ledra Fabricius, 1803—feminine. Tettigonia Linnaeus, 1758—feminine.

22. At the time of the adoption of the Ruling given in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.* : 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.

23. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

**24.** The present *Opinion* shall be known as *Opinion* Two Hundred and Ninety-Nine (299) of the International Commission on Zoological Nomenclature.

DONE in London, this Eighth day of March, Nineteen Hundred and Fifty-Four.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

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